

REMARKS

Applicants appreciate the continued thorough examination of the present application as evidenced by the Final Office Action of March 21, 2008 ("Final Action"). Applicants particularly appreciate detailed response to Applicants' remarks that is provided at pages 2-3 of the Final Action. In the Final Action, the rejection of Claims 1-4 and 6-10 as anticipated by U.S. Patent No. 5,570,332 to Heath et al. has been maintained. The Final Action also rejects newly presented claims 11-16 as anticipated by Heath et al. Applicants respectfully submit that the Examiner has misinterpreted the teachings of Heath et al. as well as Applicants' arguments regarding Heath et al., and accordingly request reconsideration of the rejections for at least the reasons explained herein.

In the present Response, Applicants have only addressed particular errors in the Final Action. However, to ensure that the present Response is fully responsive, Applicants' Response To November 27, 2007 Official Action And Interview Summary, filed on January 14, 2008, is incorporated herein by reference.

1. The Rejection of Claim 18 Under 35 USC § 112 Should be Withdrawn

In the Final Action, Claim 18 was rejected under 35 USC § 112, first paragraph, as failing to comply with the written description requirement. Claim 18 recites that "at least another of the terms of the arithmetic combination comprises an exponential function of the destination cylinder." The Examiner's attention is directed to the example discussed at page 18 of the Specification with reference to Figures 6-10. The example discusses calculating an adjustment to seek length as an arithmetic combination of terms c0-c4. In the illustrated example, the source cylinder is 31000 and the destination cylinder is 30973 (for command 1013 in Figure 10). The c1 and c2 terms are both exponential functions of the destination cylinder, 30793. Accordingly, the written description provides support for the recitation of Claim 18 that "at least another of the terms of the arithmetic combination comprises an exponential function of the destination cylinder."

2. Claims 1-10 Are Patentable

The Final Action states that the effective seek length of Heath et al. is derived by adjusting the raw/unadjusted seek length with consideration of the rotational latency of the

seek. Final Action at 2. This understanding of Heath et al. is simply incorrect. In Heath et al., the order of execution of commands is adjusted based on seek length and rotational latency. However, the seek lengths, that is, the radial distance from source track to destination track, used by Heath are never adjusted at all. Heath fails to take into account that actual seek lengths can be affected by lateral offset (i.e. radial offset) between source and destination heads. Thus, Heath cannot anticipate Claim 1.

The Examiner appears to be confusing seek length with seek time. An effective seek time can be greatly affected by rotational latency. For example, if the radial location of the target sector is so close to the destination head that the head cannot reach the destination track before the target sector rotates past the destination head, then an additional disk rotation may be required for the seek. Whether or not an additional rotation is required, however, the seek length is the same. While Heath et al. take both seek length and the rotational latency into account in deciding how to order commands, Heath et al. do not adjust the seek lengths, much less adjust the seek lengths using lateral offset indicators derived from a longitudinal position measurement of the source head at a source location. Claim 1 is therefore not anticipated by Heath et al.

Claims 2-10 are patentable at least per the patentability of Claim 1.

3. Claims 11-18 Are Patentable

Applicants traverse the rejections of Claims 11-18. In particular, Applicants respectfully disagree with the characterization in the Final Action that Claim 11 recites substantially the same limitations as Claim 1. Furthermore, the Final Action has failed to explain how or where Heath et al. teach or suggest adjusting estimates of a seek lengths for queued disc access commands, much less adjusting such estimates to compensate for lateral offset present between a source head that performed a previously executed disc access command and target heads that will perform the queued disc access commands. As explained above, Heath et al. only takes raw (i.e., unadjusted) seek lengths into account in deciding which seek to execute, and contains no teaching whatsoever regarding compensating for lateral offset present between a source head and target heads. Claims 12-18 are patentable at least per the patentability of Claim 18.

CONCLUSION

In light of the above remarks, Applicant respectfully submits that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,



David C. Hall
Registration No. 38,904

Customer Number 73463
Myers Bigel Sibley & Sajovec, P.A.
P.O. Box 37428
Raleigh, NC 27627
919-854-1400
919-854-1401 (Fax)